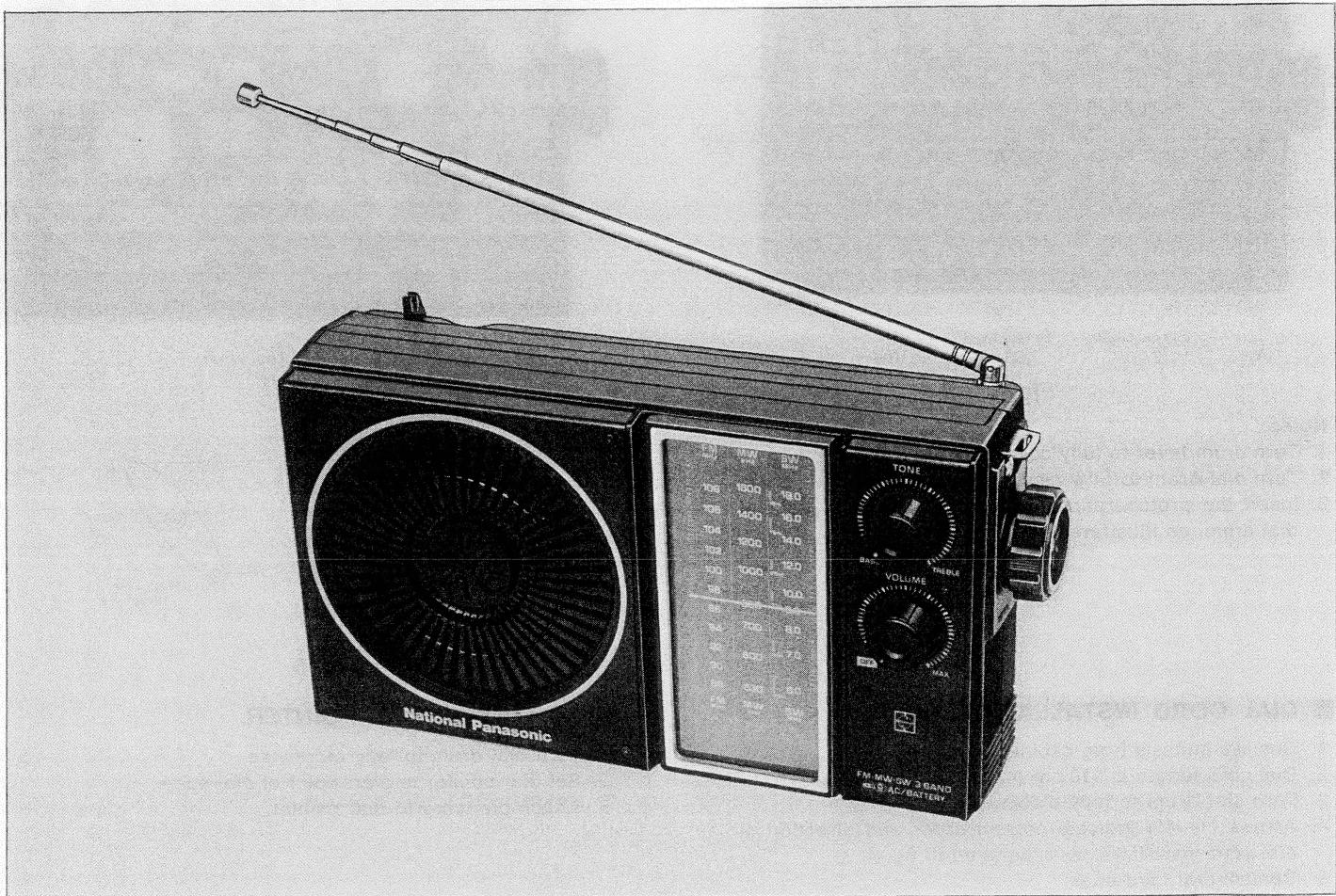


# Service Manual

Radio

1968  
**RF-818JB**

FM/MW/SW 3-BAND PORTABLE RADIO



## ■ SPECIFICATIONS

|                         |  |
|-------------------------|--|
| Frequency Range:        | FM 87.5~108 MHz<br>MW 520~1610 kHz (577~186m)<br>SW 5.9~18 MHz (5.75~18.8m)                        |
| Intermediate Frequency: | FM 10.7 MHz<br>AM (MW, SW) 455 kHz   |
| Sensitivity:            | FM 2 $\mu$ V for 50mW Output<br>MW 45 $\mu$ V/m for 50mW Output<br>SW 20 $\mu$ V/m for 50mW Output |
| Power Output:           | 1.3W Maximum   |
| Power Source:           | AC 110~125V/220~240V<br>50-60 Hz or 4.5V (Three "C" Size)  |

|                    |   |
|--------------------|---|
| Power Consumption: | Flashlight Batteries<br>(National UM-2 or equivalent)   |
| Speaker:           | 6W (AC Only)  |
| Dimensions:        | 9 cm (3 $\frac{1}{2}$ ) PM Dynamic Speaker<br>217(Wide) x 127(High) x<br>59(Deep) mm<br>(8 $\frac{17}{32}$ " x 5" x 2 $\frac{5}{16}$ ") |
| Weight:            | 0.96 kg. (2 lb. 2 oz.) without<br>batteries   |
| Impedance:         | Speaker ..... 8 $\Omega$<br>Earphone Jack ..... 8 $\Omega$  |

Specifications are subject to change without notice for further improvement.

 **National Panasonic**

Matsushita Electric Trading Co., Ltd.  
P.O. Box 288, Central Osaka, Japan

1968

## ■ TO REMOVE CHASSIS

1. Remove tone and volume knobs from cabinet.
2. Remove battery cover.
3. Remove three (3) cabinet cover screws, nos. 1~3, as illustrated in fig. 1.
4. Pull out three (3) connecting sockets.

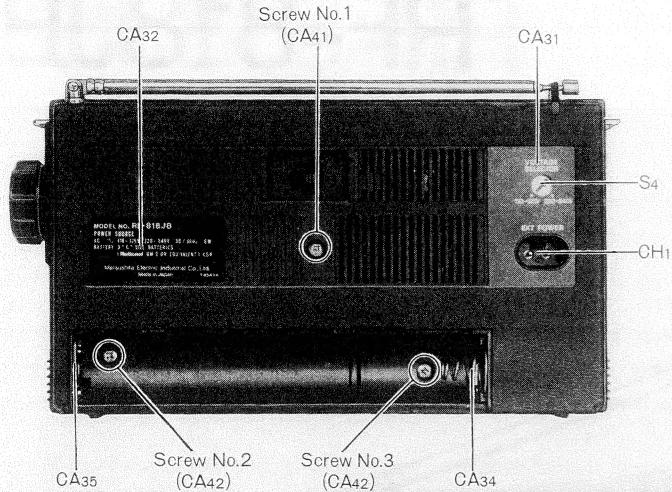


Fig. 1

### Notes:

1. Turn drum lever to fully counter-clockwise.
2. Turn dial drum to fully clockwise.
3. Insert the protuberances of drum lever in the hole of dial drum, as illustrated in fig. 3.

5. Remove four (4) red chassis screws, nos. 1~4, as illustrated in fig. 2.
6. To remove chassis completely, unsolder lead wire to earphone jack and speaker terminals.
7. To reassemble, reverse the above procedure and read the following notes.

Red Screw No.1 (CH11)      Red Screw No.2 (CH11)      Red Screw No.3 (CH11)

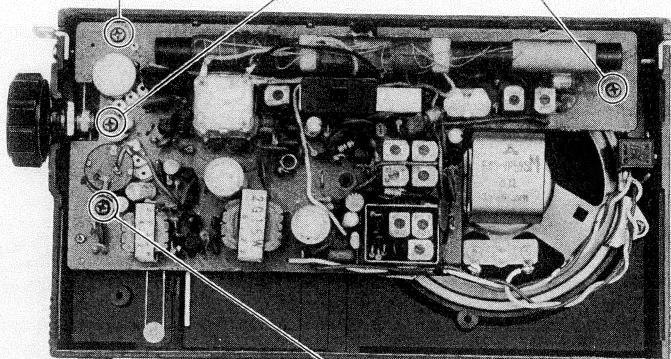


Fig. 2

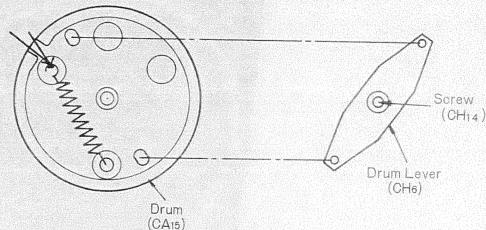


Fig. 3

## ■ DIAL CORD INSTALLATION GUIDE

1. Remove chassis from cabinet.
2. Dial cord length is 110 cm (43 $\frac{5}{16}$ "').
3. Turn dial drum to fully clockwise.
4. Arrows (1~10) indicate correct order and direction of dial cord installation as illustrated in fig. 4.
5. Cement dial cord ends.

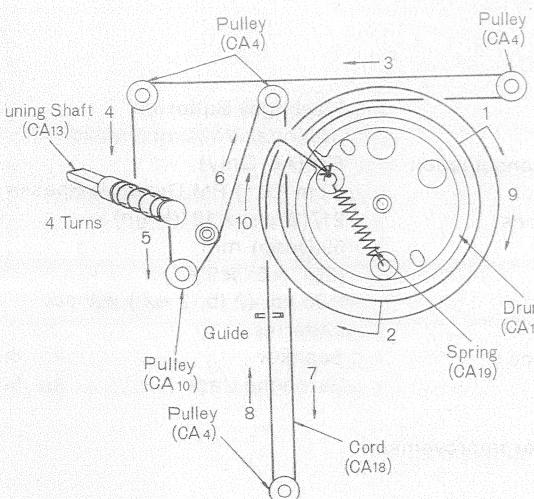
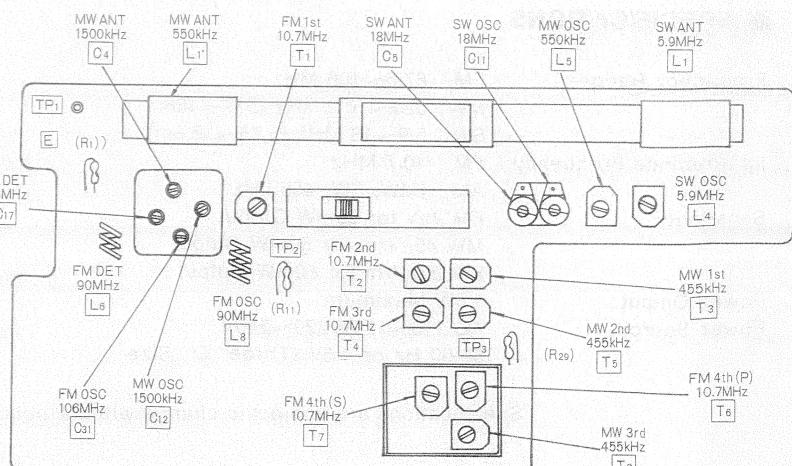


Fig. 4

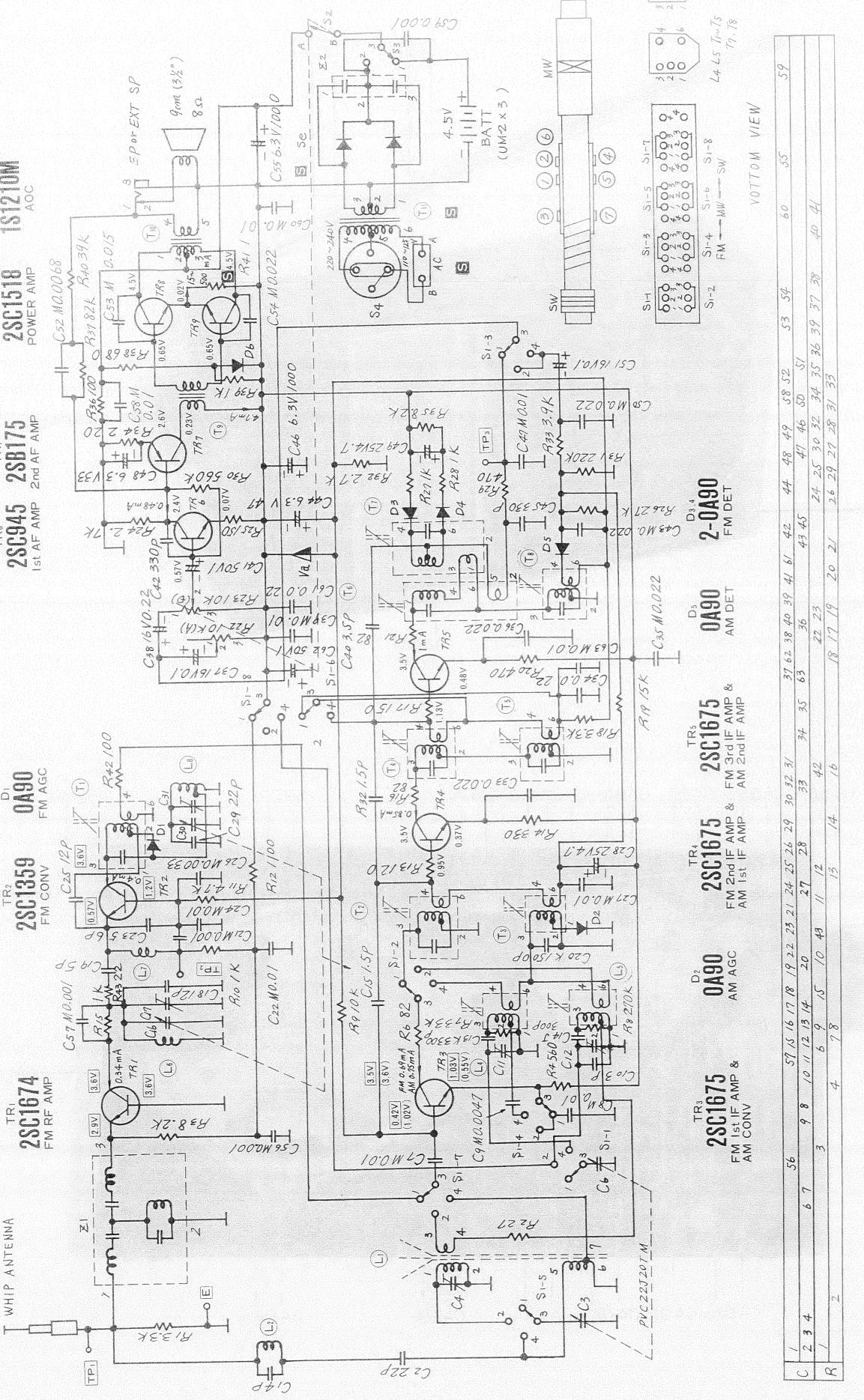
## ■ TO MOUNT DIAL POINTER

1. Turn dial drum to fully clockwise.
2. Set dial pointer to start point of dial scale.
3. Attach dial cord to dial pointer.

## ■ ALIGNMENT POINTS



## Schematic Diagram – Model RF-818JB



### Notes:

1. S1-1~S1-8: Band selector switch in "FM" position.
2. S2: Power source switch in "OFF" position.
3. S3: AC-Battery selector switch in "Battery" position.
4. S4: Voltage selector switch in "220V" position.

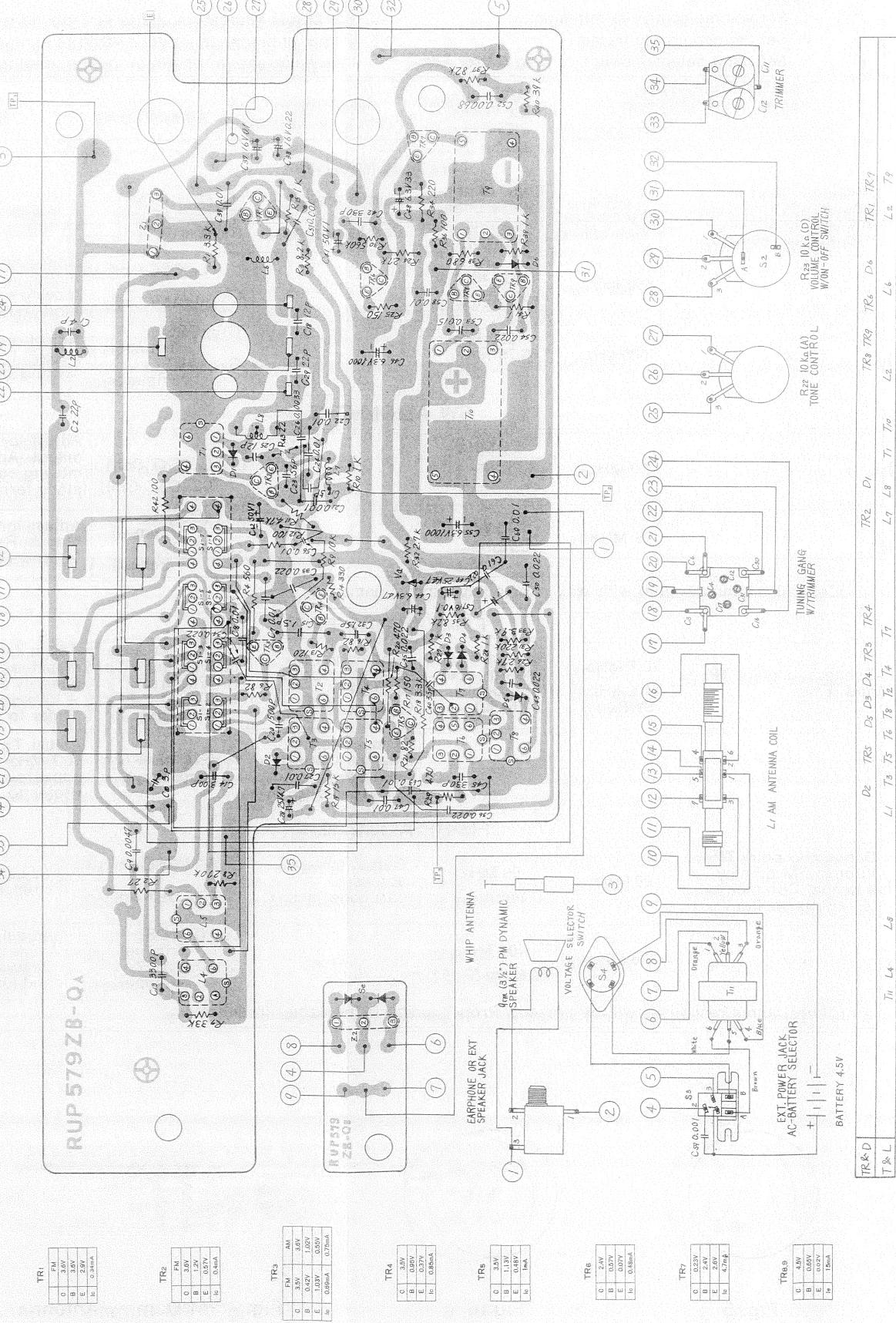
5. DC voltage measurements are taken with circuit tester

10kΩ from negative terminal of battery.

6. FM position: No signal..... 30mW
7. Maximum output ..... 450mW

7. **S** indicates that only parts specified by the manufacturer be used for replacement in critical circuits.

## Circuit Board Wiring View – Model RF-818JB



## ■ ALIGNMENT INSTRUCTIONS

### READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

#### Notes:

1. Set volume control to minimum.
2. Set tone control to treble.
3. Set band selector switch to MW, SW or FM.
4. Set power source voltage to 4.5 volts DC.
5. Output of signal generator should be no higher than necessary to obtain an output reading.

| SWEEP GENERATOR<br>SIGNAL GENERATOR or |           | RADIO DIAL<br>SETTING<br>[DISTANCE] | INDICATOR<br>(VTVM or SCOPE) | ADJUSTMENT | REMARKS |
|--|-----------|-------------------------------------|------------------------------|------------|---------|
| CONNECTIONS                            | FREQUENCY |                                     |                              |            |         |

| MW ALIGNMENT |   |  |  |   |   |
|--------------|---|--|--|---|---|
| (1)          | Fashion loop of several turns of wire and radiate signal into loop of receiver. | 455 kHz<br>30% Mod.<br>with 400 Hz.        | Point of non-interference.<br>(on/about 600 kHz) | Output meter across earphone jack.                            | T <sub>3</sub> (1st IFT)<br>T <sub>5</sub> (2nd IFT)<br>T <sub>8</sub> (3rd IFT)            |
| (2)          | "   | 550 kHz<br>[6.98mm( $\frac{9}{32}$ "")]    | "  | L <sub>5</sub> (OSC Coil)<br>(*) L <sub>1'</sub> (ANT Coil)   | Adjust for maximum output. Adjust L <sub>1'</sub> by moving coil bobbin along ferrite core. |
| (3)          | "   | 1500 kHz<br>[66.79mm (2 $\frac{5}{8}$ "")] | "  | C <sub>12</sub> (OSC Trimmer)<br>C <sub>4</sub> (ANT Trimmer) | Adjust for maximum output. Repeat steps (2) and (3).  |

| SW ALIGNMENT |   |  |   |   |  |
|--------------|---|--|---|---|--|
| (4)          | " | 5.9 MHz<br>[2.79mm ( $\frac{1}{8}$ ")]     | " | (*) L <sub>1</sub> (ANT Coil)<br>L <sub>4</sub> (OSC Coil)    | Adjust for maximum output. Adjust L <sub>1</sub> by moving coil bobbin along ferrite core. |
| (5)          | " | 18 MHz<br>[70.72mm (2 $\frac{13}{16}$ "")] | " | C <sub>11</sub> (OSC Trimmer)<br>C <sub>5</sub> (ANT Trimmer) | Adjust for maximum output. Repeat steps (4) and (5).                                       |

(\*) Cement antenna bobbin with wax after completing alignment.

| FM-IF ALIGNMENT |   |                            |  |   |   |
|-----------------|---|----------------------------|--|---|---|
| (6)             | Connect to point TP <sub>2</sub> and [E]. | 10.7 MHz<br>(400 kHz SWP.) | Point of non-interference.<br>(on/about 90 MHz). | Connect vert. amp. of scope to point TP <sub>3</sub> , Common to [E]. | T <sub>1</sub> (FM 1st IFT)<br>T <sub>2</sub> (FM 2nd IFT)<br>T <sub>4</sub> (FM 3rd IFT)<br>T <sub>6</sub> (FM 4th IFT)<br>(Primary) |
| (7)             | "   | "                          | "  | Connect vert. amp. of scope to point TP <sub>3</sub> , Common to [E]. | T <sub>7</sub> (FM 4th IFT)<br>(Secondary)  |

| FM-RF ALIGNMENT |  |         |   |                                    |  |
|-----------------|--|---------|---|------------------------------------|--|
| (8)             | Connect to point TP <sub>1</sub> through FM dummy antenna. Common to [E]. (Refer to fig. 7). | 90 MHz  | 90 MHz<br>[9.14mm( $\frac{11}{32}$ "")]   | Output meter across earphone jack. | L <sub>8</sub> (FM OSC Coil)<br>L <sub>6</sub> (FM DET Coil)         |
| (9)             | "  | 106 MHz | 106 MHz<br>[62.8mm (2 $\frac{5}{32}$ "")] | "                                  | C <sub>31</sub> (FM OSC Trimmer)<br>C <sub>17</sub> (FM DET Trimmer) |

(\*) Three output responses will be present; Proper tuning is the center frequency.

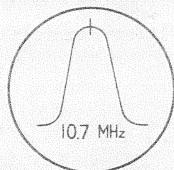


Fig. 5

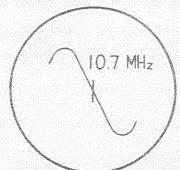


Fig. 6

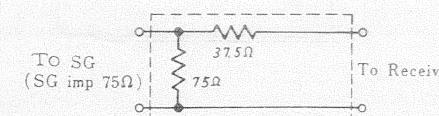
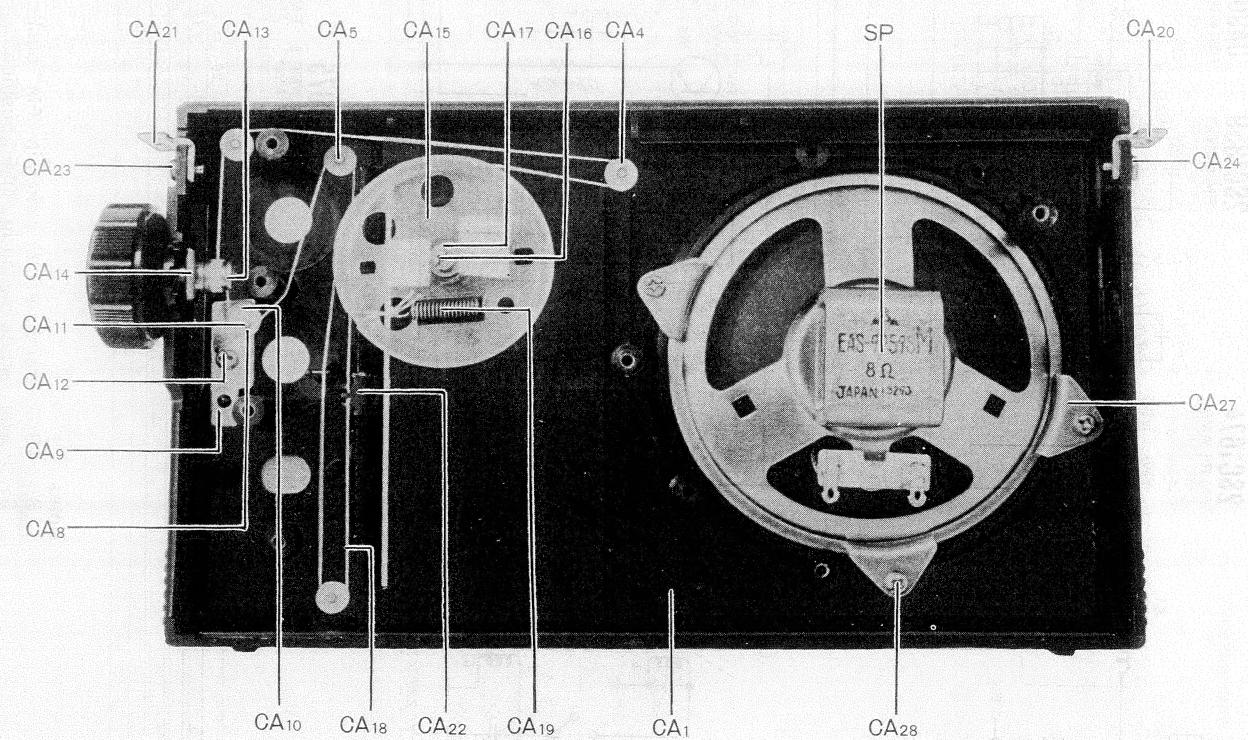
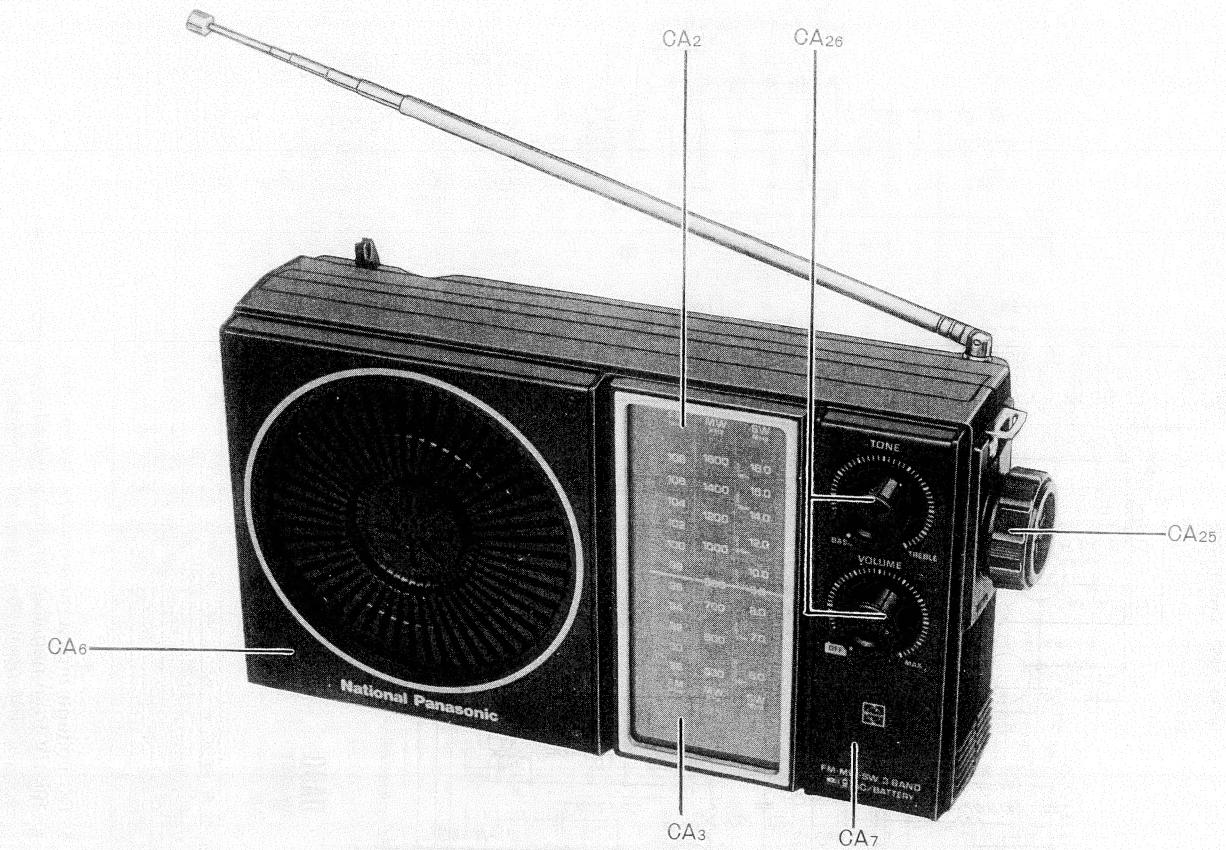
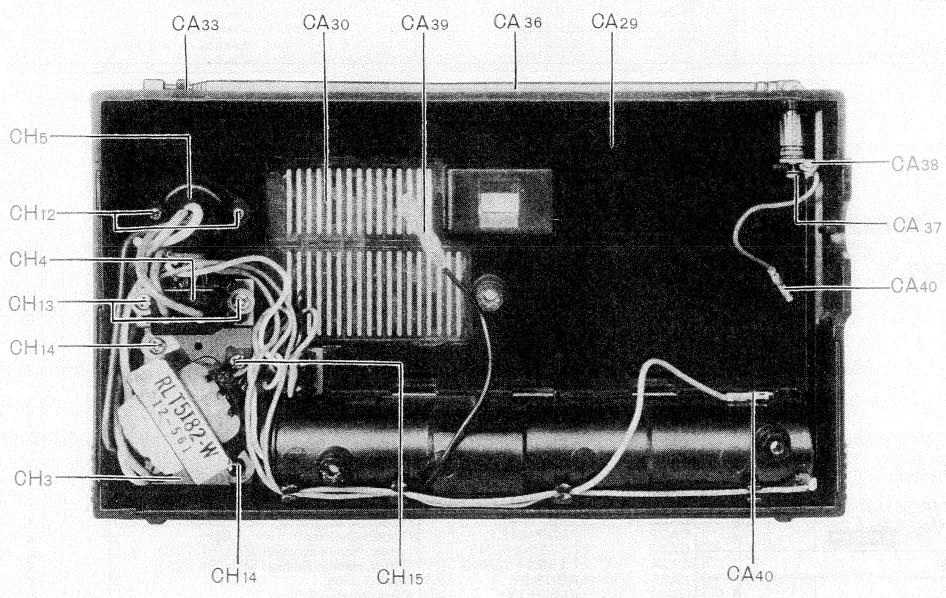


Fig. 7 FM Dummy Antenna

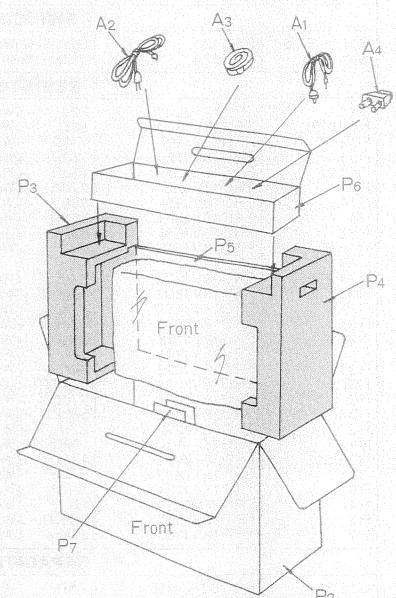
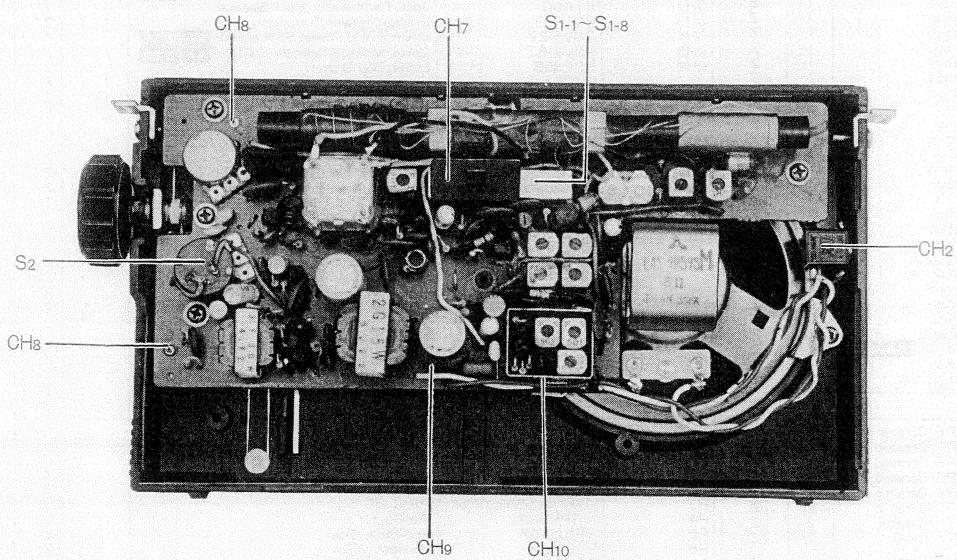
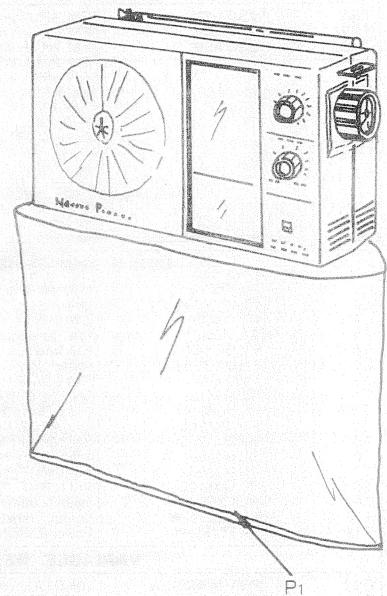
## ■ CABINET PARTS LOCATIONS



■ CHASSIS PARTS LOCATIONS



■ ACCESSORIES & PACKING PARTS LOCATIONS



# REPLACEMENT PARTS LIST

**NOTES:**

- Part numbers are indicated on most mechanical parts.  
Please use this part number for parts orders.
- X-Z rank parts will cover 80% of repair needs.  
X+Y rank parts will cover 95% of repair needs.
- Z rank parts are less necessary.
- SAFETY** indicates that only parts specified by the manufacturer be used for replacement in critical circuits.

| Ref.No.                       | Part No. | Description   | Per Set | Remarks |
|-------------------------------|----------|---|---------|---------|
| <b>TRANSISTORS AND DIODES</b> |          |   |         |         |
| TR1                           | 2SC1674  | FM RF Amplifier   | 1       | X       |
| TR2                           | 2SC1359  | FM Converter  | 1       | X       |
| TR3                           | 2SC839   | FM 1st IF Amplifier & AM Converter,                           | 1       | X       |
| TR4,5                         | 2SC1675  | FM 2nd & AM 1st IF Amplifier,<br>FM 3rd & AM 2nd IF Amplifier | 2       | X       |
| TR6                           | 2SC945   | 1st AF Amplifier  | 1       | X       |
| TR7                           | 2SB175   | 2nd AF Amplifier  | 1       | X       |
| TR8,9                         | 2SC1518  | Power Amplifier   | 2       | X       |
| D1,2,5                        | 0A90     | FM/AM AGC, AM Detector  | 3       | X       |
| D3,4                          | 2-0A90   | FM Detector   | 1Pair   | X       |
| D6                            | 1S1210M  | Operation Compensator   | 1       | X       |

## VARIATITE AND RECTIFIER

| Se | RVD10D1      | Rectifier | SAFETY | 2 | X |
|----|--------------|-----------|--------|---|---|
| Va | EYV320D1R2J2 | Variatite |        | 1 | X |

## COILS AND TRANSFORMERS

|      |            |                                  |   |   |   |
|------|------------|----------------------------------|---|---|---|
| L1   | RLF5F78-0  | MW/SW Antenna Coil               | 1 | X | O |
| L2   | RLQY75S5-0 | Choke Coil                       | 1 | Y |   |
| L4   | RL03M6     | SW Oscillator Coil               | 1 | Y |   |
| L5   | RL02M7     | MW Oscillator Coil               | 1 | Y |   |
| L6   | RLD4Y44    | FM Antenna Coil                  | 1 | Y |   |
| L7   | RLQY30S1-O | Choke Coil                       | 1 | Y |   |
| L8   | RLQY443    | FM Oscillator Coil               | 1 | Y |   |
| T1   | RL14M101   | 1st FM IF Transformer            | 1 | X |   |
| T2,4 | RL14M301   | 2nd & 3rd FM IF Transformer      | 2 | X |   |
| T3   | RL12M203   | 1st MW IF Transformer            | 1 | X |   |
| T5   | RL12M205P  | 2nd MW IF Transformer            | 1 | X |   |
| T6   | RL14M501   | 4th FM IF Transformer(Primary)   | 1 | X |   |
| T7   | RL14M502   | 4th FM IF Transformer(Secondary) | 1 | X |   |
| T8   | RL12M402   | 3rd MW IF Transformer            | 1 | X |   |
| T9   | RLT2G30-W  | Input Transformer, P=700Ω, S=1KΩ | 1 | X |   |
| T10  | RLT2G15-W  | Output Transformer, P=24Ω, S=8Ω  | 1 | X |   |
| T11  | RLT5I82-W  | Power Transformer                | 1 | X |   |

## SAFETY

|     |             |  |   |   |   |
|-----|-------------|--|---|---|---|
| R22 | RVV14A26K-A | 10KΩ(A), Tone Control                        | 1 | X | O |
| R23 | RVV14D23K-A | 10KΩ(D), Volume Control, W/ON-OFF Switch(S2) | 1 | X |   |

## VARIABLE RESISTORS

|            |             |   |   |   |  |
|------------|-------------|---|---|---|--|
| C3,6,16,30 | PVC22J20T2M | Variable Capacitor, W/Trimmer(C4,17,31) | 1 | X |  |
| C11,12     | RCV2T-16M   | Trimmer                                 | 1 | Y |  |

## VARIABLE CAPACITORS

|            |             |   |   |   |  |
|------------|-------------|---|---|---|--|
| C3,6,16,30 | PVC22J20T2M | Variable Capacitor, W/Trimmer(C4,17,31) | 1 | X |  |
| C11,12     | RCV2T-16M   | Trimmer                                 | 1 | Y |  |

## COMPONENT COMBINATIONS

|    |            |                    |   |   |  |
|----|------------|--------------------|---|---|--|
| Z1 | BXCF88108M | Coils & Capacitors | 1 | Y |  |
| Z2 | EXNF2SL04C | 10000PF×2          | 1 | Y |  |

## SPEAKER

|    |           |                                      |   |   |  |
|----|-----------|--------------------------------------|---|---|--|
| SP | EAS9P59SM | 9cm(3½") PM Dynamic Speaker, Imp. 8Ω | 1 | X |  |
|    |           |                                      |   |   |  |

## SWITCHES

|           |        |                         |   |   |  |
|-----------|--------|-------------------------|---|---|--|
| S1-1~S1-8 | RSS123 | Band Selector Switch    | 1 | X |  |
| S4        | RSR12A | Voltage Selector Switch | 1 | X |  |

## RESISTORS

|                 |               |                           |   |   |  |
|-----------------|---------------|---------------------------|---|---|--|
| R43             | ERD18VJ220    | 22Ω, ½Watt, ±5%, Carbon   | 1 | Z |  |
| R6,16,21        | ERD18VJ820    | 82Ω, ½Watt, ±5%, Carbon   | 3 | Z |  |
| R12,36          | ERD18VJ101    | 100Ω, ½Watt, ±5%, Carbon  | 2 | Z |  |
| R13             | ERD18VJ121    | 120Ω, ½Watt, ±5%, Carbon  | 1 | Z |  |
| R17,25          | ERD18VJ151    | 150Ω, ½Watt, ±5%, Carbon  | 2 | Z |  |
| R34             | ERD18VJ221    | 220Ω, ½Watt, ±5%, Carbon  | 1 | Z |  |
| R14             | ERD18VJ331    | 330Ω, ½Watt, ±5%, Carbon  | 1 | Z |  |
| R4              | ERD18VJ561    | 560Ω, ½Watt, ±5%, Carbon  | 1 | Z |  |
| R38             | ERD18VJ681    | 680Ω, ½Watt, ±5%, Carbon  | 1 | Z |  |
| R10,15,27,28,39 | ERD18VJ102    | 1KΩ, ½Watt, ±5%, Carbon   | 5 | Z |  |
| R24,26,32       | ERD18VJ272    | 2.7KΩ, ½Watt, ±5%, Carbon | 3 | Z |  |
| R33             | ERD18VJ392    | 3.9KΩ, ½Watt, ±5%, Carbon | 1 | Z |  |
| R11             | ERD18VJ472    | 4.7KΩ, ½Watt, ±5%, Carbon | 1 | Z |  |
| R35             | ERD18VJ822    | 8.2KΩ, ½Watt, ±5%, Carbon | 1 | Z |  |
| R19             | ERD18VJ153    | 15KΩ, ½Watt, ±5%, Carbon  | 1 | Z |  |
| R40             | ERD18VJ393    | 39KΩ, ½Watt, ±5%, Carbon  | 1 | Z |  |
| R37             | ERD18VJ823    | 82KΩ, ½Watt, ±5%, Carbon  | 1 | Z |  |
| R31             | ERD18VJ224    | 220KΩ, ½Watt, ±5%, Carbon | 1 | Z |  |
| R8              | ERD18VJ274    | 270KΩ, ½Watt, ±5%, Carbon | 1 | Z |  |
| R30             | ERD18VJ564    | 560KΩ, ½Watt, ±5%, Carbon | 1 | Z |  |
| R2              | ERD18TJ270    | 27Ω, ½Watt, ±5%, Carbon   | 1 | Z |  |
| R42             | ERD18TJ101    | 100Ω, ½Watt, ±5%, Carbon  | 1 | Z |  |
| R20,29          | ERD18TJ471    | 470Ω, ½Watt, ±5%, Carbon  | 2 | Z |  |
| R1,18           | ERD18TJ332    | 3.3KΩ, ½Watt, ±5%, Carbon | 2 | Z |  |
| R9              | ERD18TJ103    | 10KΩ, ½Watt, ±5%, Carbon  | 2 | Z |  |
| R41             | ERX-1AN1J1ROU | 1Ω, 1Watt, Wire           | 1 | Z |  |
| R3              | ERD18VJ822    | 8.2KΩ, ½Watt, ±5%, Carbon | 1 | Z |  |
| R7              | ERD18VJ333    | 33KΩ, ½Watt, ±5%, Carbon  | 1 | Z |  |

## SAFETY

|                              |              |                               |    |   |  |
|------------------------------|--------------|-------------------------------|----|---|--|
| R44                          | ERD18VJ102PF | 0.001μF, 50WV, ±100%, Ceramic | 1  | Z |  |
| C15,32                       | ECCD1H1R5C   | 1.5PF, 50WV, ±20%, Ceramic    | 2  | Z |  |
| C10                          | ECCD1H0300C  | 3PF, 50WV, ±20%, Ceramic      | 1  | Z |  |
| C40                          | ECCD1H3R5C   | 3.5PF, 50WV, ±20%, Ceramic    | 1  | Z |  |
| C1                           | ECCD1H040C   | 4PF, 50WV, ±20%, Ceramic      | 1  | Z |  |
| C19                          | ECCD1H0500C  | 5PF, 50WV, ±20%, Ceramic      | 1  | Z |  |
| C18,25                       | ECCD1H120KC  | 12PF, 50WV, ±10%, Ceramic     | 2  | Z |  |
| C2,29                        | ECCD1H220KC  | 22PF, 50WV, ±10%, Ceramic     | 2  | Z |  |
| C42,45                       | ECCD1H331K   | 330PF, 50WV, ±10%, Ceramic    | 2  | Z |  |
| C59                          | ECKD1H102PF  | 0.001μF, 50WV, ±100%, Ceramic | 1  | Z |  |
| C21,56,57                    | ECKE1H102MD  | 0.001μF, 50WV, ±20%, Ceramic  | 3  | Z |  |
| C26                          | ECKE1H332MD  | 0.0033μF, 50WV, ±20%, Ceramic | 1  | Z |  |
| C9                           | ECKE1H472MD  | 0.0047μF, 50WV, ±20%, Ceramic | 1  | Z |  |
| C7,8,22,24,27,39,47,58,60,63 | ECKE1H103MD  | 0.01μF, 50WV, ±20%, Ceramic   | 10 | Z |  |
| C33,34,36,61                 | ECKE1H223PF  | 0.022μF, 50WV, ±100%, Ceramic | 4  | Z |  |
| C52                          | UFD10YR682M  | 0.0068μF, 25WV, ±20%, Ceramic | 1  | Z |  |
| C23                          | ECMS05560K-H | 56PF, 50WV, ±10%, Mica        | 1  | Z |  |

|                              |              |                               |    |   |  |
|------------------------------|--------------|-------------------------------|----|---|--|
| CAPACITORS                   |              |                               |    |   |  |
| C15,32                       | ECCD1H1R5C   | 1.5PF, 50WV, ±20%, Ceramic    | 2  | Z |  |
| C10                          | ECCD1H0300C  | 3PF, 50WV, ±20%, Ceramic      | 1  | Z |  |
| C40                          | ECCD1H3R5C   | 3.5PF, 50WV, ±20%, Ceramic    | 1  | Z |  |
| C1                           | ECCD1H040C   | 4PF, 50WV, ±20%, Ceramic      | 1  | Z |  |
| C19                          | ECCD1H0500C  | 5PF, 50WV, ±20%, Ceramic      | 1  | Z |  |
| C18,25                       | ECCD1H120KC  | 12PF, 50WV, ±10%, Ceramic     | 2  | Z |  |
| C2,29                        | ECCD1H220KC  | 22PF, 50WV, ±10%, Ceramic     | 2  | Z |  |
| C42,45                       | ECCD1H331K   | 330PF, 50WV, ±10%, Ceramic    | 2  | Z |  |
| C59                          | ECKD1H102PF  | 0.001μF, 50WV, ±100%, Ceramic | 1  | Z |  |
| C21,56,57                    | ECKE1H102MD  | 0.001μF, 50WV, ±20%, Ceramic  | 3  | Z |  |
| C26                          | ECKE1H332MD  | 0.0033μF, 50WV, ±20%, Ceramic | 1  | Z |  |
| C9                           | ECKE1H472MD  | 0.0047μF, 50WV, ±20%, Ceramic | 1  | Z |  |
| C7,8,22,24,27,39,47,58,60,63 | ECKE1H103MD  | 0.01μF, 50WV, ±20%, Ceramic   | 10 | Z |  |
| C33,34,36,61                 | ECKE1H223PF  | 0.022μF, 50WV, ±100%, Ceramic | 4  | Z |  |
| C52                          | UFD10YR682M  | 0.0068μF, 25WV, ±20%, Ceramic | 1  | Z |  |
| C23                          | ECMS05560K-H | 56PF, 50WV, ±10%, Mica        | 1  | Z |  |

| Ref.No. | Part No.      | Description                    | Per Set | Remarks |
|---------|---------------|--------------------------------|---------|---------|
| C50     | ECOM05223MD   | 0.022μF, 50WV, ±20%, Mica      | 1       | Y       |
| C35,43  | ECG05223MZ-T  | 0.022PF, 50WV, ±20%, Polyester | 1       | Z       |
| C20     | ECOS05152KZ   | 1500PF, 50WV, ±10%, Styrol     | 1       | Z       |
| C13     | ECQS05332KZ   | 3300PF, 50WV, ±10%, Styrol     | 1       | Z       |
| C14     | ECFE1E153MD-D | 300PF, 125WV, ±5%, Ceramic     | 1       | Z       |
| C53     | ECFD1E223MD-D | 0.015μF, 25WV, ±20%, Ceramic   | 1       | Z       |
| C48     | ECEA6V33      | 0.022μF, 25WV, ±20%, Ceramic   | 1       | Z       |
| C44     | ECEA6V100     | 33μF, 6.3WV, Electrolytic      | 1       | YY      |
| C46,55  | ECEA25V4R7    | 47μF, 6.3WV, Electrolytic      | 2       | YY      |
| C28,49  | ECEA50V1      | 1000μF, 6.3WV, Electrolytic    | 2       | YY      |
| C41,62  | ECA16ER1      | 1μF, 50WV, Electrolytic        | 2       | Y       |
| C37,51  | ECA16ER22     | 0.1μF, 16WV, Electrolytic      | 1       | Y       |
| C38     |               | 0.022μF, 16WV, Electrolytic    | 1       | Y       |

## CABINET

|       |  |                                  |   |   |
|-------|--|----------------------------------|---|---|
| CAB1  | →RYMF818JBX                                    | Cabinet Body Assembly(Black)     | 1 | X |
| CAB2  | →RYMF818JBX1                                   | Cabinet Body Assembly(Gold)      | 1 | X |
| CAB3  |  | Panel, Dial                      | 1 | O |
| CAB4  | Not Available Order, RYMF818JBX or RYMF818JBX1 | Scale, Dial(White) .....(Black)  | 1 | O |
| CAB5  |  | Scale, Dial(Green) .....(Gold)   | 1 | O |
| CAB6  | RGK558X2                                       | Pulley, Dial                     | 1 | O |
| CAB7  | RGK558X1                                       | Ornament(Black)                  | 1 | Y |
| CAB8  | RGK560X1                                       | Ornament(Gold)                   | 1 | Y |
| CAB9  | RGK560X  | Ornament(Black)                  | 1 | Y |
| CAB10 | RGK560X  | Ornament(Gold)                   | 1 | Y |
| CAB11 | RML500-2                                       | Washer, Dial Pulley              | 2 | Z |
| CAB12 | RML68Z   | Bracket, Pulley Shaft            | 1 | Z |
| CAB13 | RDR21-1  | Pulley, Dial                     | 1 | Z |
| CAB14 | RDY34  | Shaft, Pulley                    | 1 | Z |
| CAB15 | XTN3-8B  | Screw, Pulley Shaft Bracket M'tg | 1 | Z |
| CAB16 | RTD906   |                                  |   |   |